Venereal Disease Contacts Of Merchant Seamen

By Johannes Stuart, Ph.D. and George Joyce

THE Division of Foreign Quarantine, in cooperation with the then Division of Venereal Disease, Public Health Service, conducted a study of venereal disease contacts among merchant seamen during a 6-month period beginning June 1, 1951, and ending November 30, 1951. The purpose of the study was to determine which seaports of the world are the principal foci of infection.

Each major quarantine station in the United States, Hawaii, and Puerto Rico participated. A contact study report was completed for each seaman (citizen or alien) who had been treated for venereal disease during the voyage to the United States or who had clinical symptoms of venereal disease and was so diagnosed upon arrival. The report form included the name and nationality of vessel, date of arrival, nationality of the seaman, venereal disease for which the seaman was treated, number of previous infections, ports where sex contacts occurred, number of days of shore leave, and number and type of different sex partners.

In the 6-month period of the study, 2,426 infected seamen reported 4,364 sex contacts in ports throughout the world. This represents a contact index of 1.80. Of the total number of infected seamen, 2,052 (84.6 percent) were treated for venereal disease en route to the United States, and 381 (15.7 percent) were treated upon arrival. (The total exceeds 100

Dr. Stuart is health program officer and Mr. Joyce is a statistician with the Venereal Disease Branch, Division of Special Health Services, Public Health Service. percent because some men were treated both en route and upon arrival.) Patients with gonorrhea accounted for 1,953 of the venereal infections and comprised 80.5 percent of the total 2,426. Based on current venereal disease rates, the 1,953 cases of gonorrhea represent the morbidity which might be expected from a population of 1,286,000 United States citizens annually. Similarly, the 225 cases of syphilis are equal to the annual morbidity of infectious cases to be expected among 1,086,000 United States citizens.

Although some 30 countries of residence were represented, 64 percent of the infected seamen were Americans. Fifty-one percent of the patients reported they had had previous infections. The number of infected seamen reported to quarantine stations in the various geographic areas are as follows: east coast, 982; gulf coast, 298; west coast, 1,057; Hawaii, 60; and Puerto Rico, 29. The nationalities of infected seamen, arranged in descending order of frequency, were: American, Norwegian, British, Danish, Swedish, Canadian, Dutch, Greek, German, Honduran, Finnish, French, Cuban, and Spanish. Each of these nationalities included 10 or more infected seamen.

Table 1 lists the leading ports of exposure throughout the world and shows the number of seamen infected and the number of exposures. The total number of infected seamen and contacts also are shown for each port and continent. Since some men were exposed in more than one port, the sum of infected men in this table exceeds the total of 2,426.

Table 2 indicates the number of contacts by geographic area of exposure and type of contact. "Pickup-no-fee" is reported more often than any other type of contact in ports of the United States and Europe. On the other hand, "house prostitute" is reported more often than other types of contacts in Mexico, Japan, West Indies, Central America, South America, India, and Africa. Of the total contacts in all ports, almost half (47.2 percent) were reported as "house prostitute." The remaining types of contacts were distributed among "streetwalker"

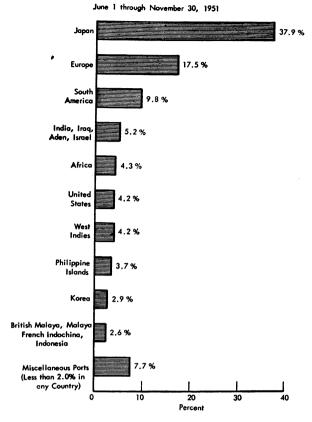
Table 1. Number of infected merchant seamen and sex contacts, by leading ports of exposure and continent, June 1—November 30, 1951

Port of exposure, by continent	Number infected seamen	Number sex contacts	Port of exposure, by continent	Number infected seamen	Number sex contacts
N					``
North America:			Europe—Continued		
New York City		32	Hamburg, Germany		60
Baltimore		31	Rouen, France	39	64
Houston		14	All other ports of Europe	347	510
San Francisco	9	15			
All other ports of the United			Total	525	763
States	67	92			
All ports of Canada	22	27	Africa:		
Tampico, Mexico	9	11	Casablanca, Morocco (French)	20	45
Veracruz, Mexico	6	7	Durban, Union of South Africa	16	26
Alvaro Obregon, Mexico	4	4	Capetown, Union of South Africa.	13	17
All other ports of Mexico	4	5	All other ports of Africa	57	100
Havana, Cuba	31	45	in other perus of infloating		
Santiago, Cuba	11	20	Total	106	188
Trinidad, British West Indies	16	19	10001	100	100
Con Juan D D		11	Asia:		
San Juan, P. R. All other ports of West Indies	70	87	Bombay, India	38	74
Puerto Cortes, Honduras	70	7	Calcutta, India	47	85
	7	8	Vizagapatam, India	24	26
Puntarenas, Costa Rica	6	7		20	20 29
Cristobal, C. Z	U	• 11	All other ports of India		
All other ports of Central America.	44	60	Yokohama, Japan	355	700
			Kobe, Japan	198	292
Total	366	502	Moji, Japan	85	125
			Sasebo, Japan	68	95
South America:	İ		All other ports of Japan	256	442
Vitória, Brazil	54	102	Pusan, Korea	79	116
Santos, Brazil	44	73	Manila, Philippine Islands	72	84
Rio de Janeiro, Brazil	30	57	Hong Kong, China	40	47
All other ports of South America	156	194	Jogjakarta, Indonesia	37	40
-			All other ports of Asia	232	330
Total	284	426	- I-		
			Total	1, 551	2, 485
Europe:	i	11	=		
Bremerhaven, Germany	52	59	Grand total	2, 832	4, 364
Rotterdam, Netherlands	47	70		_,	-, -, -

Table 2. Venereal disease contacts of merchant seamen, by geographic area of exposure and type of contact, June 1—November 30, 1951

Geographic area	Number of con-	Percentage distribution of contacts				
		House prostitute	Street- walker	Pickup- no-fee	Friend	Unknown
United States Mexico West Indies Central America South America Europe Africa India Japan	184 27 182 82 426 763 188 214 1, 654	17. 4 70. 4 50. 0 57. 3 55. 4 16. 0 71. 3 82. 2 52. 4	14. 7 14. 8 21. 4 20. 7 17. 8 33. 6 6. 4 4. 7 32. 9	52. 2 14. 8 24. 7 15. 9 24. 9 45. 1 19. 7 8. 0	15. 7 0 3. 9 6. 1 1. 4 4. 8 2. 6 2. 3 3. 8	0 0 0 0 . 5 0 2. 8
Miscellaneous ports of PacificOther miscellaneous ports	601 43	54. 1 25. 6	31. 6 18. 6	11. 6 44. 2	2. 5 11. 6	0.2
Total	4, 364	47. 2	27. 1	21. 0	4. 0	. 7

Percentage distribution of 4,364 contacts of merchant seamen infected with venereal disease, by geographic area of exposure.



(27.1 percent), "pickup-no-fee" (21.0 percent), and "friend" (4.0 percent).

The chart shows graphically the percentage distribution of contacts by area of exposure. Japan represents the greatest venereal disease problem with 1,654 contacts (37.9 percent of the total 4,364 sex contacts). Europe ranked second with 763 contacts (17.5 percent of the total).

A question which arose but is not answered by the analysis of the preceding data was how much of a hazard is presented by merchant seamen as agents in the transmission of venereal disease across international boundaries. Since all the seamen in the group above were treated before or upon arrival in the United States, no opportunity was permitted them on their return to transmit infections acquired abroad to residents of the United States.

To assay the extent of such transmission, another group of patients was interviewed for contacts: 119 merchant seamen with infectious syphilis admitted to the Staten Island Public Health Service hospital in 1952–53. Of those interviewed, 34 (29 percent) reported contacts both in the United States and in foreign countries. It would thus seem that a considerable proportion of infected merchant seamen were acting as agents in the international exchange of venereal disease.

However, when these 34 individuals naming both foreign and United States contacts were classified by nationality, it was found that only 3 of them were foreign seamen. The remainder were Americans. It would appear, therefore, that the American seamen may be the principal agent among seafaring personnel in carrying venereal disease between foreign countries and the United States. This may be associated to some extent with the greater accessibility to sex partners by American merchant seamen because of their higher pay scales. It probably is more closely related to the fact that American seamen are not screened for disease at American ports of entry in the same way as are foreign seamen.

